

Iowa Department of Natural Resources

Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 22.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. Western Minnesota Municipal Power Agency - Exira Station, located at 3429 Jay Avenue, Brayton, IA 50042, has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Mr. Terry Wolf.
2. Western Minnesota Municipal Power Agency - Exira Station is an electrical services facility. This facility consists of four (4) emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	399.3
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	399.3
Particulate Matter	PM	399.3
Sulfur Dioxide	SO ₂	302.59
Nitrogen Oxides	NO _x	246.56
Volatile Organic Compounds	VOC	175.55
Carbon Monoxide	CO	245.34
Lead	Lead	0.08
Hazardous Air Pollutants ⁽¹⁾	HAP	11.16

⁽¹⁾ May include the following: Acetaldehyde, Acrolein, Arsenic Compounds, Benzene, 1,3-Butadiene, Cadmium Compounds, Chromium Compounds, Ethyl Benzene, Formaldehyde, Manganese Compounds, Naphthalene, Nickel, PAH total, Propylene Oxide, Selenium, Toluene, Xylenes (Mixed Isomers).

3. Western Minnesota Municipal Power Agency - Exira Station submitted a Title V Operating Permit renewal application on October 18, 2021. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 22.107.
4. DNR has complied with the procedures set forth in 567 IAC 22.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from June 2, 2022 through July 2, 2022. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

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DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 20-35, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 20-35.
4. DNR is required to comply with 567 IAC Chapter 22 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

Title V Application Review Notes R3

Applicant:	Western Minnesota Municipal Power Agency - Exira Station
SIC Code:	4911
City:	Brayton
County:	Audubon, Field Office 4
EIQ#:	92-6920
Facility#:	05-04-002
Permit #:	06-TV-003R3
Reviewer:	Derek Wedemeier
Date:	**DATE**

Facility Identification

Facility Name:	Western Minnesota Municipal Power Agency - Exira Station
Facility Location:	3429 Jay Avenue Brayton, IA 50042
Responsible Official:	Terry Wolf
Phone:	605-338-4042

The Part 70 Title V Operating Permit for Western Minnesota Municipal Power Agency - Exira Station. The facility is an electric services station. Western Minnesota Municipal Power Agency - Exira Station has 4 significant emission units and 2 insignificant emission units. Western Minnesota Municipal Power Agency – Exira Station has also applied for a renewal Phase II Acid Rain Permit. The application was received on 10/18/2021.

Title V Major Source Status by Pollutant:

Pollutant	Major for Title V?
PM ₁₀	<input checked="" type="checkbox"/>
SO ₂	<input checked="" type="checkbox"/>
NO _x	<input checked="" type="checkbox"/>
VOC	<input checked="" type="checkbox"/>
CO	<input checked="" type="checkbox"/>
Lead	<input type="checkbox"/>
Individual HAP	<input type="checkbox"/>
Total HAPs	<input type="checkbox"/>

Applicable Rules and Regulations

1. Facility Wide Opacity: No more than 40%. 567--IAC 23.3(2)"d".
2. Facility Wide SO₂: 500 parts per million by volume. 567--IAC 23.3(3)"e"
3. Title IV: U-1, U-2, and U-3 are effected sources and Clean Air Interstate Rule (CAIR) Permit was replaced with currently applicable Cross State Air Pollution (CSAPR) regulations.
4. Subject to 112(r) Prevention of Accidental Releases? No
5. PSD: No
6. NAAQS: Yes
7. Stratospheric ozone: Yes
8. NESHAP:
40 CFR 63 Subpart ZZZZ
The Emergency Generator (FP-1) is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP).
9. NSPS:
40 CFR 60 Subpart GG
All turbines (U-1, U-2, and U-3) are subject to the Performance Standards for Stationary Gas Turbines. Applicable requirements are incorporated in the Emission Point Specific conditions.
40 CFR 60 Subpart IIII
EP-FP-1 is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source is model year 2008 and is 200 hp. All applicable limits from this subpart have been included as emission limits in construction permit 08-A-607.

Emission Estimations

The potential emissions calculations were based off of construction permit limits, NESHAP limits, and AP-42 emission factors.

Emission Values

PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Lead	Total HAPs
Potential Emissions								
399.3	399.3	399.3	302.59	246.56	175.55	245.34	0.08	11.16
Actual Emissions 2021*								
4.73	4.73	4.72	4.18	60.29	1.24	23.18	0.00	0.00

*The actual emissions reported for the 2020 calendar year.

The following changes have been made to the Title V permit:

1. TV Permit number has been updated to 06-TV-003R3 (pp. 1, 5, 6, 9, and footer).
2. Responsible Official has been updated.
3. Table of Contents page numbers updated and Appendix details updated (pp. 2 & 34).
4. Plant Wide conditions updated to reflect current standards (pp. 6-8).
5. Appendices are updated.

Emission Point – Specific Conditions

1. U-1, U-2 & U-3 (pp. 9-15):

- Reviewed all applicable limits and checked for consistency and formatting.
- Periodic Monitoring requirements were evaluated on the Department's Periodic Monitoring Guidance.
- Conditions 5 and 6 of Operating Condition Monitoring found in Construction Permits 03-A-617-S1 and 03-A-618-S1 were omitted from this permit because of the EPA approved waiver dated April 23, 2004 for units U-1 and U-2. These conditions were not included in Construction Permit 06-A-652-S1 for U-3.
- CEMS monitoring is required for NO_x.

2. FP-1 (pp. 16-18):

- The unit is an 200 bhp emergency fire pump limited to 500hr per 12 month period, rolled monthly.
- Emission limits and fuel specifications are set by Requirements for 40 CFR Part 60 Subpart IIII.
- Additional operating requirements can be found in the permit.

Periodic Monitoring

Periodic Monitoring requirements were evaluated based on the Department's Periodic Monitoring Guidance. Units U-1, U-2, and U-3 have Continuous Emissions Monitoring (CEMS) in place for NO_x as required by 40 CFR subpart GG. The most recent CEMS Report and RATA testing were submitted in July 2021. RATA testing for the CEMS equipment was completed on May 11, 2021. The next RATA tests will be performed in May of 2023.

These units are also required to stack test for PM₁₀ and CO if the units run on fuel oil more than 800 unit hours in a calendar year. If a stack test is required one unit may be tested and considered representative of the other units.

FP-1 has no control and therefore periodic monitoring does not apply.